

ABSTRACT OF THE DISCLOSURE

A method of detecting spatially correlated variations that may be used for detecting statistical outliers in a production lot of integrated circuits to increase the average service life of the production lot includes measuring a selected parameter of each of a plurality of electronic circuits replicated on a common surface; calculating a difference between a value of the selected parameter at a target location and a value of the selected parameter an identical relative location with respect to the target location for each of the plurality of electronic circuits to generate a distribution of differences; calculating an absolute value of the distribution of differences; and calculating an average of the absolute value of the distribution of differences to generate a representative value for the residual for the identical relative location.